ABSTRACT OF THE DISCLOSURE

There are provided an organic light emitting diode (OLED) display driving apparatus and a driving method thereof, in which the OLED display panel driving apparatus of a passive matrix type is configured such that its scan driving circuit has 3-state output, and the cathode lines, selected when the scan driving circuit performs a scan operation, maintain grounding, and after data-applied OLED emits light, are switched in a high voltage, and execute a refresh operation to initialize the pixel charges, and with the high impedance state maintained, non-selective common cathode lines turn into a high impedance state so as to remove the parasitic capacitance elements, and reduce the capacitance element functioning as the load of the data driving circuit connected to the OLED anode lines, and without the use of precharge method of maintaining the anode lines above a predetermined voltage quickly by using a voltage source, and applying data by using a current source, the anode lines can be charged within a short time just by necessary current for the lightening of the OLED so as to reduce the power consumption of the data driving circuit, and increase the operation speed.